Maritime & Coastguard Agency

UK Approved Body Authorised by the MCA

Marine Equipment UK Assessment
Module B Type Examination Certificate

This is to certify that TUV SUD BABT UNLIMITED did undertake the relevant type approval procedures for the type of equipment identified below, which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, under Annex 1 of the listed Amendment of MSN 1874 for the types of equipment identified.

MSN 1874 Amendment	**Amendment 9**
Certificate Holder and Manufacturer	**Northrop Grumman Sperry Marine B.V.** **118 Burlington Road,** **New Malden,** **Surrey** **KT3 4NR** **United Kingdom**
Product(s)	**VisionMaster Net ECDIS with Track Control**
Product Sector	**Navigation Equipment**
Product Type	**UK/4.33 Track Control System (working at ship's speed from minimum manoeuvring speed up to 30 knots)**

and on the basis of the Technical Data and information detailed in the Annex to this certificate.

(Andy Little)

Valid from: 20 May 2024   Expiry Date: 22 March 2025

TÜV SÜD BABT is a UKAS accredited Certification Body No. 0172.
This certificate has been issued in accordance with the TÜV SÜD Testing, Certification, Validation and Verification Regulations and constitutes page 1 of the combined Certificate and Annex.
The Conditions for the validity of this certificate are listed in the Annex.
For further details related to this certification please contact BABT@tuvsud.com

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Annex to
Marine Equipment UK Conformity Assessment
Module B Type Examination Certificate

1   Equipment Description

Track Control System

1.1.1   Processors and Displays

Model	Description
67026AA or 67026AB	26" Panel PC
67024AB or 67019AB	24" or 19" Panel PC
67003AH or 67003KH	Control panel with trackball + keyboard (Integrated or Kit)
67003AF or 67003KF	Control Panel with trackball only (Integrated or Kit)
67003KT	Trackball Desktop Assembly
32SDT003, 32SDT004, 32SDT005 or 32SDT006 [Notes 1&2]	Security Device
074929-0000-xxx [Note 3]	NAVIPILOT 4500N, Control and Display Unit (CDU)
074928-0000-xxx [Note 3]	NAVIPILOT 4500N, Autopilot Processing Unit (APU)

1.1.2   Interface Units

Model	Description
67004600	Serial Port Expander
4802181 and 65932739	Network Serial Interface and Network switch kit (EDS-G509)

1.1.3   Optional Components

Model	Description
65900AA or 65900AB	PCIO Interface Unit
65900685	Mains Distribution Unit
1982776	Analogue Interface Unit
65932605	Digital Interface Unit
68001AA [Note 4]	Secure Maritime Gateway
4303153	Course Mode Joystick
074851-0000-xxx	Steering Control Interface Unit

1.2   Software [Note 5]

Identity	Version
VisionMaster Net	4.1.0
Baseline Operating System	Windows 10 IoT Enterprise LTSC, Version: 1809
NAVIPILOT 4500N Application	2.xxx

2 Assessed Requirements

2.1 MSN 1874 Amendment 9 Annex 1

2.2 Compliance Requirements for UK/4.33 Row 2 of 2 Notes 6, 7 & 8

Type approval requirements	Carriage and Performance Requirements
SOLAS 74 Reg V/18	SOLAS 74 Reg. V/19 IMO Res. A.694(17) IMO Res. MSC.74(69) IMO Res. MSC.191(79) IMO Res. MSC.302(87).
Assessed Testing Standards	
IEC 62065:2014	IEC 62288 : 2021
IEC 60945: 2002 incl. IEC 60945 Corr. 1: 2008	IEC 61162-1: 2016
IEC 61162-2: 1998	IEC 61162-450: 2018 Note 9
IEC 62923-1: 2018	IEC 62923-2: 2018

3 Technical Documentation

3.1 Declaration of Conformity

DOC084-MER VMNet Series

3.2 User Guide

VisionMaster Net ECDIS User Guide, Part No. 67000012 Rev.6
VisionMaster Net Ships Manual Vol 1, Part No.67000011V1 Rev.6
VisionMaster Net Ships Manual Vol 2, Part No. 67000011V2 Rev.6
Navipilot 4500N Operation Manual, Part No. 056403 Rev.B
Navipilot 4500N Installation and Service Manual, Part No. 056404 Rev.B

3.3 Test Reports

IEC 60945:2002 (inc Corr.1)	75913301 Report 10 Issue 1, 2020-03-17	JTUV008, 2020-01-27
	JTUV009, 2020-01-22	75947558 Report 01 Issue 01, 2020-01-09
	P19-0070, 2019-04-24	P19-0152-1, 2019-09-03
	5P03620 Rev1, 2015-10-16	P18-055-1, 2018-12-04
	P21-0035-2, 2021-06-24	5P05962 rev 1, 2015-12-16
	P20-0136, 2020-10-07	E13184.00, 2013-08-20
	20053, 2013-11-19	-
IEC 62065:2014	75943301 Report 09, 2020-03-11	MERB00006Y5, 2022-11-15
	TR-V3.0.1-VMNet-126 Issue: 2, 2023-08-03	5032-0141-12, 2023-06-14
	TR-V3.0.1-VMNet-122 Issue: 1, 2023-06-26	TR-V4.0.0-VMNet-133, 2023-11-15
	TR-V4.1.0-VMNet-148, 2024-05-03	-
IEC 62288:2021	75913301 Report 04 Issue 1, 2020-02-27	TR-V1.1.0-VMNet-081, 2021-08-11
	TR-V1.1.0-VMNet-079-TC, 2021-08-17	TR-V3.0.0-VMNet-103, 2023-01-23
	TR-V3.0.0-VMNet-107, 2022-12-20	75956857 Report 01 Issue 1, 2022-12-16
	TR-V3.0.0-VMNet-105, 2022-11-30	409514r00, 2020-11-12
	346060r02, 2020-11-25	TR-V3.0.1-VMNet-124 Issue: 1, 2023-07-20
	75959442 Report 01 Issue 1, 2023-11-15	TR-V4.0.0-VMNet-139, 2023-11-16
	TR-V4.1.0-VMNet-146, 2024-05-03	-

Test Reports - continued

IEC 61162 Series	75943301 Report 06 Issue 1, 2020-03-04	75943301 Report 07 Issue 2, 2020-03-05
	75943301 Report 08 Issue 1, 2020-03-09	TR-V1.1.0-VMNet-076, 2021-08-09
	TR-V1.1.0-VMNet-077, 2021-08-09	TR-V1.1.0-VMNet-078, 2021-08-11
	75952849 Report 02 Issue 01, 2021-12-06	-
IEC 62923-1:2018	TR-V3.0.0-VMNet-107, 2022-12-20	75952849 Report 01 Issue 01, 2021-12-16
IEC 62923-2:2018	75952849 Report 01 Issue 02, 2022-05-16	TR-V4.0.0-VMNet-135, 2023-11-14

3.4 Build Status

3.4.1 Hardware

VisionMaster Net Technical File VMNetTFRPRT Issue 5A

3.5 Notes

Note 1   The 32SDT005 Multi-node security device allows operation of an integrated multi display ships bridge. A security string defines the product type on all the nodes for a particular vessel's bridge operating plan. The product type must be set to ECDIS, ECDIS with Radar overlay or Total Watch as appropriate.

Note 2   A Total Watch product enables operation as a Multi-Function workstation and allows the operator to switch between Chart Radar, ECDIS and conning display. This certificate only applies when the mode is set to ECDIS for a Total Watch System.

Note 3   Refer to Type Approval certificate MERB00006Y5 for full product information for the NAVIPILOT 4500N.

Note 4   The 68001AA Secure Maritime Gateway is compliant with IEC 60945 (2002) requirements. This Type Approval does not cover any application or function on the external network that uses data exchanged via the Secure Maritime Gateway.

Note 5   This approval remains valid for equipment including subsequent minor software amendments which have been formally accepted in accordance with the TÜV SÜD Testing, Certification, Validation and Verification Regulations.

Note 6   The product(s) listed meet(s) the requirements of IEC 62923-1 for EUT function type P, type R and type S.

Note 7   The VisionMaster Net ECDIS with Track Control meets the requirements for a Category C track control system.

Note 8   This equipment also provides an interface to the ship's propulsion controller which is compliant with IEC 62065:2014 Annex B (Speed Control) when used in Route Based Speed Control mode.

Note 9   Image Transfer to a Voyage Data Recorder via IEC 61162-450 Interface.

4   Conditions of Validity

This certificate ceases to be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with TUV SUD BABT or a person appointed by TUV SUD BABT to perform that role.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

The "Mark of Conformity" may only be affixed to the above type approved equipment and a manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body.

Signature:		Date:	20/05/2024
	(Andy Little)		
On behalf of TUV SUD BABT UNLIMITED			